

ROANOKE RIVER BASIN

02059500 GOOSE CREEK NEAR HUDDLESTON, VA

LOCATION.--Lat 37°10'23", long 79°31'14", Bedford County, Hydrologic Unit 03010101, on left bank 0.3 mi upstream from Haden Bridge on State Highway 732, 0.4 mi upstream from Rockcastle Creek, and 3.5 mi northwest of Huddleston.

DRAINAGE AREA.--188 mi².

PERIOD OF RECORD.--March 1925 to August 1928 (gage heights only), September 1930 to current year.

REVISED RECORDS.--WSP 892: 1933, 1935(M), 1939. WSP 972: 1931-32(M), 1934(M), 1935-38, 1940, 1941(M). WSP 1082: 1940(P). WSP 1142: 1938-40(M). WSP 2104: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 592.91 ft above sea level. Mar. 15, 1925, to Aug. 4, 1928, nonrecording gage at site 1,300 ft downstream at different datum.

REMARKS.--Records good except those for period with ice effect, Jan. 5-9, and periods of doubtful gage-height record, Jan. 12, 13, May 3, Aug. 16-19, which are fair. Prior to October 1954, diurnal fluctuation at low flow caused by mill upstream from station. American Electric Power gage-height transmitter at station with recorder at Roanoke. Maximum discharge, 53,200 ft³/s, from rating curve extended above 11,000 ft³/s on basis of slope-area measurements at gage heights 19.25 ft, 24.1 ft, 24.89 ft, and 37.49 ft. Minimum discharge, 3.0 ft³/s, Aug. 31, 1932, and Jan. 30, 1934, result of freezeup. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

COOPERATION.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sep 30	0115	*5,170	*7.87	No other peak greater than base discharge.			

Minimum daily discharge, 10 ft³/s, Aug 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	42	51	58	80	81	115	76	41	31	22	22
2	32	43	49	62	156	76	140	72	41	41	21	21
3	32	51	49	228	260	93	109	e73	51	40	21	20
4	33	70	51	291	164	97	102	73	49	31	18	20
5	37	56	51	e125	127	86	96	70	43	26	18	179
6	43	50	51	e77	108	85	91	70	39	22	16	474
7	51	47	54	e99	98	81	88	70	36	29	15	291
8	80	46	55	e80	99	79	86	99	36	87	14	147
9	100	49	119	e88	94	83	85	114	33	51	16	77
10	55	51	79	127	86	84	85	85	31	31	16	82
11	48	75	60	99	84	83	180	76	31	25	15	67
12	47	64	56	e92	80	78	179	69	33	57	13	49
13	48	53	134	e86	82	74	119	110	33	121	12	45
14	46	52	140	101	81	89	105	133	31	69	14	46
15	44	52	80	152	75	346	104	201	32	57	14	48
16	42	52	65	156	74	343	110	109	33	45	e12	108
17	45	52	61	110	74	211	96	86	42	35	e11	68
18	43	49	58	180	104	173	87	75	41	41	e11	48
19	44	49	55	201	207	141	85	71	32	34	e10	44
20	45	50	55	134	143	120	85	66	31	31	36	43
21	40	51	59	113	115	125	83	59	36	38	43	63
22	39	49	59	99	101	147	81	60	42	155	25	73
23	37	49	55	109	90	133	77	60	41	62	20	48
24	41	52	79	733	85	122	84	56	37	39	20	44
25	40	50	76	393	83	116	77	53	34	30	41	42
26	42	52	66	172	80	106	73	52	38	24	70	40
27	41	52	67	129	79	98	77	51	38	21	121	48
28	41	51	64	113	89	94	91	48	36	29	51	332
29	42	49	65	100	---	88	92	48	44	81	32	586
30	42	50	63	92	---	87	81	45	33	37	27	1790
31	42	---	60	84	---	84	---	42	---	26	22	---
TOTAL	1397	1558	2086	4683	2998	3703	2963	2372	1118	1446	797	4965
MEAN	45.1	51.9	67.3	151	107	119	98.8	76.5	37.3	46.6	25.7	166
MAX	100	75	140	733	260	346	180	201	51	155	121	1790
MIN	32	42	49	58	74	74	73	42	31	21	10	20
CFM	.24	.28	.36	.80	.57	.64	.53	.41	.20	.25	.14	.88
IN.	.28	.31	.41	.93	.59	.73	.59	.47	.22	.29	.16	.98

02059500 GOOSE CREEK NEAR HUDDLESTON, VA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	132	137	172	231	250	288	263	199	153	115	132	130
MAX	719	642	616	772	821	909	1320	780	802	466	822	1229
(WY)	1938	1986	1949	1936	1998	1975	1987	1989	1995	1949	1940	1987
MIN	27.9	32.9	45.2	46.6	48.5	80.1	73.2	56.8	37.3	26.3	22.9	28.8
(WY)	1932	1932	1966	1966	1934	1981	1942	1981	1999	1966	1932	1933

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1931 - 1999

ANNUAL TOTAL	91218	30086	
ANNUAL MEAN	250	82.4	183
HIGHEST ANNUAL MEAN			393
LOWEST ANNUAL MEAN			66.8
HIGHEST DAILY MEAN	6020	Jan 28	1790 Sep 30
LOWEST DAILY MEAN	31	aSep 14	e 10 Aug 19
ANNUAL SEVEN-DAY MINIMUM	32	Sep 11	12 Aug 13
INSTANTANEOUS PEAK FLOW			5170 Sep 30
INSTANTANEOUS PEAK STAGE			7.87 Sep 30
INSTANTANEOUS LOW FLOW			(c) Aug 19
ANNUAL RUNOFF (CFSM)	1.33	.44	.98
ANNUAL RUNOFF (INCHES)	18.05	5.95	13.25
10 PERCENT EXCEEDS	461	133	323
50 PERCENT EXCEEDS	103	60	112
90 PERCENT EXCEEDS	42	30	48

- a Also Sep 16, 17, 1998.
- b From floodmarks.
- c Not determined.
- d Also Jan 30, 1934, result of freezeup.
- e Estimated.

